Solid Waste Industry for Climate Solutions

Allied Waste Services, Inc.
California Refuse Removal Council
County Sanitation Districts of Los Angeles County
Norcal Waste Systems, Inc.
Republic Services, Inc.
Waste Connections, Inc.
Waste Management

May 4, 2007

Eileen Wenger Tutt
Special Advisor to the Secretary
California Environmental Protection Agency
1001 I Street, P.O. Box 2815
Sacramento, CA 95812-2815

Subject: ***Climate Action Team Proposed Early Actions to Mitigate Climate Change in California***

Dear Ms. Tutt:

Thank you for the opportunity to provide written comments to the California Climate Action Team (CCAT) regarding the report, "Climate Action Team Proposed Early Actions to Mitigate Climate Change in California (undated, but approximately April 20, 2007). We will also be providing copies of these comments, as well as separate comments, to the ARB on their separate report: "Proposed Early Actions to Mitigate Climate Change in California" dated April 20, 2007. For the sake of brevity we will not be repeating comments in that separate letter, but have attached a copy for your reference.

The letterhead organizations and undersigned parties to this letter are part of an informal coalition of solid waste industry stakeholders known as "Solid Waste Industry for Climate Solutions" (SWICS). We have organized ourselves in this fashion to better represent the interests of the solid waste industry in discussions regarding climate change issues.

Consistency between the CCAT Report on Early Actions and the ARB Report on Early Actions

We are primarily concerned about possible inconsistencies between the two separate reports issued on the subject of Early Actions by the CCAT, the ARB and the IWMB.

GROUP 1: Discrete Early Action Measures

On page 6 of the CCAT report the description of "Landfill Gas Recovery" appears inconsistent with the discussion in the ARB report and actions being considered by the IWMB – a member of the CCAT. We suggest the following revisions:

- Landfill Gas Recovery: The IWMB is jointly developing a regulatory *discrete early action* measure that will be implemented by ARB and will require landfill gas recovery systems on ~~the few dozen~~ *approximately 41* small to medium landfills that do not currently have them. ~~and upgrade the requirements at landfills with existing systems to represent best capture and destruction efficiencies. Going forward this will be considered as an ARB measure.~~ The GHG emission reductions from ~~these strategies are~~ *this strategy* is expected to be ~~2-4~~ *0.5* MMTCO2E ~~by 2020~~ by 2012 *as a discrete early action and an additional 2-4 MMTCO2E by 2020 in conjunction with other Group 2 and Group 3 activities*.

From our understanding of the ARB Early Action Report, they are only recommending to require landfill gas recovery systems at about 41 landfills that currently do not have such systems as a "discrete early action" at this time. The solid waste industry can support this objective provided that this option is further carefully evaluated prior to proceeding.

The ARB Early Action report indicates that additional regulatory action to achieve increased efficiency may be considered at a later date once an IWMB guidance document has been developed. Further, the statement of work developed by the IWMB for the guidance document indicates it will be used on a voluntary basis by California landfills to reduce emissions:

> *. . . developing guidance that landfill operators and regulators can use to evaluate potential changes to landfills that will result in additional GHG emission reductions. The study will be based on an evaluation of existing state-of-the-art practices, as reflected in published literature, reports to regulatory agencies, and contractor familiarity with specific landfill practices and projects. It will evaluate the technologies and practices and recommend practical and cost-effective site-specific measures that can be used on a* ***voluntary basis to reduce GHG emissions*** *from landfills in California (emphasis added).*

As we pointed out in our separate letter to the ARB, the solid waste industry believes that the development of voluntary guidance is appropriate. However, proceeding with further regulatory action at this time is not appropriate given the uncertainty regarding actual fugitive emissions from landfills that already have gas collection systems. Fortunately, work has been started on the CEC/IWMB study to evaluate fugitive landfill gas emissions. Definitive conclusions on landfill gas capture efficiencies should be deferred until more is known. As documented in the ARB report, approximately 94% of the solid waste in place has an active gas collection system. There is technical evidence on the record documenting that many landfill gas system operators are already achieving 95+% landfill gas collection and destruction efficiency.

GROUP 2: Additional Early Action Measures to Reduce GHGs Already Underway or to be initiated by the CAT members in 2007-2009.

On page 11 the CCAT report includes several additional activities by the CIWMB for early action. We suggest the following revisions:

- **Landfill Methane Capture Strategy (2006 CAT Report strategy):** The IWMB is analyzing increasing the efficiency of existing landfill methane systems and examin*ing* the implementation of earlier placement of final cover. The IWMB is collaborating with the CEC on a study to obtain field data and improve the estimates for the proposed strategy. The IWMB is conducting an emissions inventory that will be crucial in quantifying the GHG emissions reductions associated with this strategy. ~~The GHG emissions reductions from this strategy are included in the Landfill Gas Recovery item enumerated above in Group 1.~~ *At this time the collection of gas at uncontrolled landfills is being considered for inclusion in Group 1 above as a discrete early action. However, further regulatory action related to increased landfill gas collection efficiency is awaiting the completion of the CEC study on fugitive landfill emissions and completion of the IWMB guidance on reducing landfill emissions that is currently being developed. The GHG emissions reductions from these strategies are expected to be 2-4 MMTCO$_2$E by 2020.*

Other than the discrete early action to initiate a program to capture landfill gas at landfills that currently do not have controls, the solid waste industry believes that other actions relative to achieving increased efficiency of landfill gas capture and destruction should be moved to Group 2 or Group 3. There are simply no accurate measurements of fugitive landfill gas emissions. Some operators are able to offer evidence that they are achieving 95%+ landfill gas capture.

- **Organic Materials Management:** IWMB will develop a market incentive program to encourage the *management of* organic materials ~~management industry to increase organics diversion to the agricultural industry.~~ *in ways that will minimize GHG emissions.* The GHG emissions reductions from this strategy are still to be determined. *Conversion technologies using organic materials such as cellulosic ethanol production and anaerobic digestion have the potential to minimize GHG emissions through the production of energy, alternative fuels and other industrial products. As with landfill gas to energy, these technologies have significant financial and regulatory barriers. If these projects are to provide any amount of GHG reductions, these barriers must be addressed.*

It is too early to tell what organic materials management strategies will work best to minimize GHG emissions. While increase diversion to the "agricultural industry" may be one option, considerable evidence exists that the best strategy for minimizing GHG emissions from organic materials may be to maximize their use as a biogenic source of renewable energy.

- **Landfill Gas Energy:** IWMB is providing funding for demonstration grants for Landfill Gas to Energy & LNG/biofuels projects. The GHG emission reductions from this strategy are still to be determined. *In addition to financial barriers, there are also considerable regulatory barriers to increased bio-energy projects. The IWMB will work cooperatively with project proponents to seek ways to address economic and regulatory barriers to these projects.*

The solid waste industry believes that the CCAT and the IWMB should find ways to allow an increase in bio-energy projects to voluntarily develop by finding ways to economically incentivize such projects and help find ways to address regulatory barriers preventing further biomass energy development – including the conversion of landfill gas to energy and other conversion technologies.

- **Target Recycling:** IWMB is focusing on industry/public sectors with high GHG components to implement targeted commodity recycling programs. The GHG emissions reductions from this strategy are still to be determined. *Increased recycling provides a tremendous opportunity to reduce GHG emissions. One way to incentivize increased recycling is by providing GHG reduction credits to entities engaged in recycling collection, processing and manufacturing activities. The CIWMB will evaluate ways in which increase recycling can be incentivized by GHG reduction credits.*

The solid waste industry believes that the CCAT and the IWMB should focus on ways in which GHG reduction credits could be applied to recycling activities to incentivize and increase rates of recycling and source reduction.

Thank you for your consideration of the above issues. If you require any further information or have any questions, please contact any one of the undersigned individuals.

Sincerely,

Chuck Helget
for Allied Waste Services, Inc.
(916) 563-7123

Evan Edgar, P.E.
California Refuse Removal Council
(916) 739-1200

Frank Caponi, P.E.
Supervising Engineer
County Sanitation Districts of Los Angeles County
(562) 699-7411 x2460

Don Gambelin
Vice-President
Norcal Waste Systems, Inc.
(415) 875-1194

David Zeiger
Area Compliance Manager
Republic Services, Inc.
(510) 262-1669

Tom Reilly, P.E.
Regional Engineering Manager
Waste Connections, Inc.
(925) 672-3800

Charles White, P.E.
Director of Regulatory Affairs
Waste Management
(916) 552-5859

George Eowan
California Refuse Removal Council
(916) 965-6700

cc: Chuck Shulock, ARB, Program Manager for Greenhouse Gas Reduction
Mark Leary, CIWMB, Executive Director
Ted Rauh, CIWMB, Division Chief, Permits and Compliance
Scott Walker, CIWMB, Branch Manager, Remediation, Closure and Technical Services
Judi Friedman, CIWMB, Waste Prevention and Market Development
Michael Robert, ARB, Staff Lead (Early Action)
Alberto Ayala, ARB, Chief, Climate Change Mitigation and Science Branch
Richard Corey, ARB, Chief, Research and Economic Studies Branch
Renaldo Crooks, ARB, Staff Lead, Landfill Gas
Richard Boyd, Manager, Process Evaluation Section